LVIII.—Descriptions of new Species of Japanese Land-Shells. By G. K. Gude, F.Z.S.

A FURTHER consignment of Helicoid land-shells received from Mr. Hirase contains seven undescribed species.

Kaliella elata, sp. n.

Shell subperforate, elongate-conoid, thin, fragile, subpellucid, corneous, under the microscope seen to be covered with about ten spiral line above the periphery, below minutely spirally striated, shining. Spire elevated, apex obtuse, suture slightly impressed. Whorls 6, compressed, increasing slowly; the last not descending in front, angulated at the periphery, a little convex below, narrowly impressed around the axis. Aperture a little oblique, subquadrate; peristome thin, straight, acute; margins distant, the columellar margin vertical, slightly reflected over the narrow perforation.

Four specimens.

Diam. 1.5, alt. 2 millim.

Hab. Kashima, prov. Harima. Type in my collection.

Kaliella crenulata, sp. n.

Shell imperforate, conoid, thin, fragile, subpellucid, pale corneous, minutely ribbed above, shining and minutely striated below. Spire conoid, apex obtuse, suture linear. Whorls 6, flattened, increasing slowly, the last not descending; periphery with a crenulate keel, convex below, narrowly impressed round the axis. Aperture subvertical, subquadrate; peristome thin, straight, acute; margins distant, columellar margin subvertical, slightly reflected above.

One specimen.

Diam. 2.75, alt. 3 millim.

Hab. Kashima, prov. Harima. Type in my collection.

Differs from its nearest ally K. acutangula, A. Ad., by the flatter whorls, less convex base, and crenulated keel. It is also nearly double the size, although having but half a whorl in excess of its congener. Five specimens from Kioto, previously referred to K. acutangula, prove to pertain to this new species.

Kaliella pagoduloides, sp. n.

Shell imperforate, ovoid-conoid, thin, subpellucid, ochreous-corneous; under the microscope seen to be finely ribbed

above, spirally wrinkled below. Spire convex-conoid, apex obtuse, suture impressed. Whorls 5\frac{3}{4}, rather tumid, increasing slowly, the last not descending in front, convex below, narrowly impressed round the axis. Aperture vertical, truncate-lunate; peristome thin, straight; margins distant, columellar margin vertical, slightly reflected above.

Two specimens.

Diam. 2, alt. 1.75 millim.

Ilab. Kashima, prov. Harima. Type in my collection. Allied to K. stenogyra, but it has fewer whorls than that species and is rounded at the periphery. In shape it much resembles a very minute Ganesella pagodula, Ehrm.

Pyramidula (s. s.) pretiosa, sp. n.

Shell umbilicate, discoid, corneous under an oliviceous cuticle, distantly costulate. Spire depressed, apex obtuse, suture rather deep. Whorls 3½, a little rounded, increasing rather rapidly; the last scarcely descending in front, angulated at the periphery. Aperture roundly ovate; peristome thin, straight, acute; margins approaching, columellar margin a little reflected over the narrow deep umbilicus.

Ten specimens.

Diam. 1½, alt. 1 millim.

Hab. Fukura, Awaji Island. Type in my collection. Allied to P. amblygona, Reinh., but much smaller.

Trishoplita Dacostæ, sp. n.

Shell deeply umbilicated, conoid, finely striated, obsoletely decussated with microscopic spiral lines, perceptible only in the depressions between the striæ, corneous, pellucid, rather solid, shining below, duller above. Spire depressed, apex obtuse, suture deeply impressed. Whorls 5-5\frac{1}{4}, rounded above, a little flattened below, increasing rather rapidly; the last shortly deflected in front, rounded at the periphery, widened towards the mouth and sloping into the umbilicus behind the peristome. Aperture oblique, subrotundate; peristome scarcely thickened, slightly expanded all round, the margins approaching, columellar margin a little reflected over the deep but moderately wide umbilicus, which exhibits the anterior half of the penultimate whorl.

Two specimens.

Diam. maj. 10·5-11·5, minor 9-9·5; alt. 7-8 millim. Hab. Kagashima, prov. Satsuma. Type in my collection. Allied to T. conospira, Mts., but more solid and with wider umbilicus. The spiral sculpture is scarcely perceptible under a strong lens. A specimen in the collection of Mr. S. J. Da Costa, and labelled by the late Dr. Hungerford "Satsuma, sp., Ikao, Nippon," I also refer to this new species. It is a little more shining and smaller than the type, measuring:—Diam. maj. 9.5, minor 8; alt. 6 millim.

Ganesella tosana, sp. n.

Shell narrowly umbilicated, depressed conoid, finely striated, decussated with fine spiral lines, thin, pellucid, a little shining below, silky above, with a broad milky-white band under the suture, the umbilical region more or less clouded with milky white. Spire depressed, apex prominent, suture impressed. Whorls 5½-6, rounded, increasing rather rapidly, the last widened towards the mouth, descending shortly in front, obsoletely angulated at the periphery; aperture oblique, ovate-rotundate; peristome thin, acute, margins convergent, the lower expanded, the columellar margin reflected over the narrow deep umbilicus.

Three specimens.

Diam. maj. 14, minor 12; alt. 9 millim.

"," ,", 13, ", 11.5; alt. 9.5 millim.

Hab. Ushirogawa, Tosa Island. Type in my collection.

The present species is allied to G. Hilgendorf, Kob., but it is thinner, more depressed, and with narrower umbilicus.

Eulota (Euhadra) grata, sp. n.

Shell sinistral, deeply umbilicated, conical; embryonal whorls smooth, the others finely regularly ribbed, the interstices minutely spirally striated; thin, glossy, subpellucid, the earlier whorls pale corneous, the later ones straw-yellow. Spire elevated, apex obtuse, suture margined. Whorls 6½, rounded, increasing somewhat rapidly, the last shortly deflected in front, angulated at the periphery, becoming rounded and widened at the mouth, a little flattened below. Aperture oblique, broadly lunate; peristome rather thin, white; margins approaching, upper straight, acute, outer and lower broadly expanded and reflected, columellar reflected over the narrow deep umbilicus.

Two specimens.

Diam. maj. 27, minor 24; alt. 21.5 millim.

Hab. Nishigo, prov. Uzen. Type in my collection.

Var. zonata, nov.

Ornamented with a wide, ill-defined, and more or less interrupted ochreous-brown zone, reaching from near the suture to below the periphery.

Hab. Same as the type.

This handsome new species belongs to the group of *E. quæsita*, Desh. It is, however, much smaller, much more elevated in the spire, thinner in texture, more shining, and has a narrower umbilicus. The dark zone of the variety is evidently the result of the diffused colouring-matter of three bands—one peripheral, one supra- and one infraperipheral—which are faintly visible on holding the shell to the light.

LIX.—Notes on the Neuropterous Family Nemopteridæ. By W. F. Kirby, F.L.S., F.E.S.

THIRTY-THREE species of this small but very interesting family are enumerated in the present paper, of which the Natural History Museum possesses fourteen, which I have distinguished by an asterisk (*). They are remarkable for the great length of the hind wings, which take the form of long slender tails.

I have given the synonymy with tolerable completeness, as the references are very scattered, and many of them occur

in old books not always easy of access.

It is somewhat remarkable that, as in the Ascalaphidae, the brightly coloured species are nearly all Mediterranean, while those with hyaline fore wings mostly occur elsewhere.

Genus I. NEMOPTERA.

Nemoptera, Latr. Hist. Nat. Crust. Ins. iii. p. 296 (1802), xiii. p. 20 (1805); Olivier, Enc. Méth. viii. p. 173 (1811); Klug, Abhandl. Akad. Berlin, 1836, p. 92; Walker, List Neur. Ins. ii. p. 470 (1858); Hagen, Stett. ent. Zeit. xxvii. pp. 374, 451 (1866); Proc. Bost. Soc. Nat. Hist. xxiii. p. 250 (1886).

Nemopteryx, Leach, Zool. Misc. ii. p. 74 (1815). Physapus, Leach, Edinb. Encycl. ix. p. 137 (1815).

Nematoptera, Burm. Handb. Ent. ii. p. 984 (1840); Westwood, P. Z. S. 1841, p. 9; Ann. & Mag. Nat. Hist. viii. p. 376 (1842).

The types of this genus are Nemoptera coa, L., as figured by Coquebert and Latreille. The latter figure has been referred to N. bipennis, but seems to possess the distinctive characters of N. coa.